

<b>Grant Information: Institution, Principal Investigator(s), Contact Information, Grant Number</b>	<p><b>RemBac Environmental LLC</b></p> <p><b>Project:</b> Development of an Innovative Approach for In Situ Treatment of PCB Impacted Sediments by Microbial Bioremediation</p> <p><b>Project Leader:</b> <a href="#">Craig Bennett Amos</a>, <a href="#">Upal Ghosh</a>, <a href="#">Kevin Sowers</a></p> <p>Contact: <a href="mailto:ben@sedimite.com">ben@sedimite.com</a></p> <p><b>Funding Period:</b> 2023-2025 R44ES032365</p>
<b>Technology</b>	<p>The proposed research will advance toward commercialization a novel in situ bioremediation technology that employs microbes and activated carbon to treat PCB impacted sediments.</p>
<b>Innovation</b>	<p>Current methods for treating PCB-contaminated sediments are expensive, energy-intensive, and disruptive to the ecosystem. Sustainable, minimally invasive, and relatively low-cost technology is critically needed to help reduce the vast inventory of PCB-contaminated sediments. Our innovative technology meets this need by employing naturally occurring PCB degrading microbes combined with activated carbon pellets as a delivery system for in situ sequestration and degradation of PCBs in sediments.</p>
<b>Contaminant and Media</b>	<p>We are targeting polychlorinated biphenyls (PCBs) in intertidal sediments.</p>
<b>Expansion Potential</b>	<p>The sensor has been evaluated using PFAS spiked synthetic wastewater samples, but has not validated with real world samples yet.</p>
<b>Sites/Samples</b>	<p>We proposed testing the technology at the New Bedford Harbor Superfund site located in Fairhaven, Massachusetts.</p>
<b>Technology Readiness Level</b>	<p>TRL 6 — Technology demonstrated in relevant environment (Industrially relevant environment in the case of key enabling technologies)</p>
<b>Update of Progress</b>	<p>The project was recently funded, and we are in the early stages of developing the work plan and seeking approvals from site stakeholders.</p>



*Application of bioamended SediMite™ that combines the advantages of adsorption by activated carbon and degradation by microbes for in situ cleanup of PCB-contaminated sediments.*